IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellants:	Stephen GOLD et al.	§	Confirmation No.:	3200
		§		
Serial No.:	10/684,001	§	Group Art Unit:	2185
		§		
Filed:	October 10, 2003	§	Examiner:	Y. Campos
		§		
For:	Methods and Systems	§	Docket No.:	200309328-1
	For Calculating Required	§		
	Scratch Media	§		

APPEAL BRIEF

Mail Stop Appeal Brief – Patents   Date: January 21, 2009
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

    Appellants hereby submit this Appeal Brief in connection with the above-identified application. A Notice of Appeal is filed concurrently herewith.

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I.   REAL PARTY IN INTEREST

The real party in interest is Hewlett-Packard Development Company, L.P. (HPDC), a Texas Limited Partnership, having its principal place of business in Houston, Texas. HPDC is a wholly owned affiliate of Hewlett-Packard Company (HPC). The Assignment from the inventors to HPDC was recorded on October 10, 2003, at Reel/Frame 014610/0733.

II.   RELATED APPEALS AND INTERFERENCES

Appellants are unaware of any related appeals or interferences.

III.   **STATUS OF THE CLAIMS**

     Originally filed claims: 1-26.

     Claim cancellations: 2, 11, 20 and 26.

     Added claims: None.

     Presently pending claims: 1, 3-10, 12-19 and 21-25.

     Presently appealed claims: 1, 3-10, 12-19 and 21-25.

IV.   STATUS OF THE AMENDMENTS

No claims were amended after the final Office action dated November 14,
2008.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The specification is directed to methods and systems for calculating required scratch media.[1] At least some of the illustrative embodiments are methods as in claim 1:[2]

> 1. A method comprising:
> obtaining information regarding a future backup from one or more backup applications for a plurality of backup jobs **{7, [0020], lines 2-4; Figure 2, element 210}**;
> calculating a projected number of media for a future execution of at least one of the backup jobs using the information regarding the future backup **{7, [0021], lines 13; Figure 2, element 210}**, said calculating also comprising dividing an average historical backup size of the backup job by an average capacity of a media type associated with the backup job **{9, [0028], lines 1-3; Figure 5, element 515}**; and
> presenting the projected number of media to a user. **{8, [0023], lines 1-3; Figure 2, element 215}**

Other illustrative embodiments are methods as in claim 15, which have all the limitations of claim 1, and further recite:

> 15. The method of claim 1, further comprising receiving from the user a list of one or more media to be used. **{3, [0035], lines 1-7; Figure 6, element 605}**

Yet still other illustrative embodiments are systems as in claim 17:

> 17. A system comprising:
> a computer system configured to receive backup job information for a plurality of backup jobs from one or more backup applications **{5, [0016], lines 2-3; Figure 1, elements 100, 102}**, the backup job information includes an average historical backup size for one or more of the backup jobs **{9, [0027], lines 1-2; Figure 5, element 510}**;
> a computer system configured to calculate a number of media for a future execution of at least one of the backup jobs using the backup job information **{9, [0017], lines 3-5; Figure 1, elements 100, 104}**, the number of media for the future execution calculated

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[1] Specification Title.

[2] For convenience, citations to the specification as filed take the shorthand form **{[page], [paragraph], lines [lines within the paragraph]}**.

by dividing the average historical backup size of the
backup job by an average capacity of a media type
associated with the backup job **{9, [0028], lines 1-3;
Figure 5, element 515}**; and
a user interface configured to present the number of media
to a user. **{6, [0017], lines 6-7; Figure 1, elements
100 and 106}**

Other illustrative embodiments are machine-readable storage mediums as in
claim 23:

> 23.   A machine-readable storage medium having stored thereon
> sequences of instructions, which, when executed by a machine,
> cause the machine to:
>> obtain backup job information from one or more backup
>> applications for a plurality of backup jobs **{7, [0020],
>> lines 2-4; Figure 2, element 210}**;
>> calculate a proposed number of media for one or more future
>> executions of at least one of the backup jobs using
>> the backup job information **{7, [0021], lines 13;
>> Figure 2, element 210}**; and
>> present the proposed number of media to a user **{8, [0023],
>> lines 1-3; Figure 2, element 215}**, wherein
>> instructions for calculating the proposed number of
>> scratch media comprise instructions, which, when
>> executed by the machine, cause the machine to
>> perform, for each backup job, divide an average
>> historical backup size by an average capacity of a
>> media type associated with the backup job. **{9,
>> [0028], lines 1-3; Figure 5, element 515}**

VI.   GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1, 3-5, 8-10, 12-19 and 21-25 are obvious under 35 USC § 103(a) over Bolin et al. (U.S. Pat. No. 5,664,146, hereafter "Bolin") in view of Kanai et al. (U.S. App. Pub. No. 2002/0152181, hereafter "Kanai").

Whether claims 6-7 are obvious under 35 USC § 103(a) over Bolin, Kanai and Carlson et al. (U.S. App. Pub. No. 2004/044862, hereafter "Carlson").

VII.   ARGUMENT

A.   Section 103 Rejections over Bolin and Kanai

1.   Claims 1, 3-5, 8-10, 12-14, 16-19 and 22-25

Claims 1, 3-5, 8-10, 12-19 and 21-25 stand rejected as allegedly obvious over Bolin and Kanai. Claim 1 is representative of this grouping of claims. The grouping should not be construed to mean the patentability of any of the claims may be determined in later actions (*e.g.*, actions before a court) based on the groupings. Rather, the presumption of 35 USC § 282 shall apply to each of these claims individually.

Bolin is directed to a graphical user communications interface for an operator in a manual data storage library.[3] In particular, Bolin discloses a manual system, where mounting (physically placing) and unmounting (physically removing) magnetic tapes from tape readers is performed by a human as specifically instructed on a graphical user interface.

> Thus, a librarian workstation 15 is provided as an integral part of the manual data storage library 16.[4]

> [A]n interactive "Action List" window 193 is preferably always displayed on screen 29 to an operator. The "Action List" window 193 presents library tasks for the operator to perform.[5]

The host computers 10 in the Bolin system send specific commands to the library manager 18, such as to eject a specific volume, or to mount a specific volume.[6] Thus, the library manager 18 knows not whether a specific mount or unmount request is to read previously written data on the volume, or to write data to the volume, only that a mount or unmount action needs to be performed.

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[3] Bolin Title.

[4] Bolin Col. 7, lines 44-46.

[5] Bolin Col. 7, lines 63-66.

[6] Bolin Col. 11, lines 21-55; Figure 6.

Claim 1, by contrast, specifically recites, "obtaining information regarding a future backup from one or more backup applications for a plurality of backup jobs; calculating a projected number of media for a future execution of at least one of the backup jobs using the information regarding the future backup." The Office action cites Bolin's mention of a migration and backup application[7], and then states:

> [A]ll cartridges are used for storage of data, and are intended to be written to or read in the future … wherein application programs in the host processor send commands to the task module… .[8]

As mentioned, only commands regarding mounting and unmounting appear to be sent to Bolin's library 16. The Office action fails to specifically point to what portion of Bolin actually obtains "information regarding a future backup from one or more backup applications." If the mount or unmount command received by the library 16 is the "information regarding a future backup," then Bolin and Kanai (relied only for the specific calculation) fail to teach "calculating a projected number … using the information regarding the future backup" as Bolin's library 16 does not calculate a number of media. Conversely, of Bolin's migration and backup application is relied upon for "obtaining information regarding a future backup from one or more backup applications," then Bolin and Kanai fail to teach "calculating a projected number … using the information regarding the future backup" as, according to the Office action, "all cartridges … are intended to be written to" and therefore there is no need to perform such a calculation.

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[7] Office action of November 14, 2009, Page 5, numbered paragraph 10.

[8] *Id.* (internal citation omitted).

In the Response to Arguments section of the Office action, the following statement is made:

> [S]tep 260 of figure 6 is can [sic] be considered as presenting a projected number of one media to be loaded and used... wherein, the total of all the cartridges in the system is deemed as the projected media; note that all the cartridges are calculated/deemed necessary for future data storage.[9]

First, it is noted that the logic is internally inconsistent – on the one hand indicating "a projected number of one media" and on the other hand indicating "all the cartridges in the system is deemed as the projected media." Appellants respectfully submit that if a teaching is said to be inherent in a reference, as is the case at hand, then at the very least that teaching should be consistenty to truly be inherent. Here, the Office action cannot form a consistent interpretation to meet the claim limitations, and thus Appellants respectfully submit that inherent teaching of Bolin is simply not present.

Moreover, if all the cartridges of the system are the projected media as alleged by the Office action, there would be no need to calculate the projected media. Thus, reliance on Bolin for the limitation regarding "calculating a projected number ... using the information regarding the future backup" is clearly misplaced.

Based on the foregoing, Appellants respectfully request that the rejections of this grouping be reversed, and the claims set for issue.

2.   Claims 15 and 21

Claims 15 and 21 stands rejected as allegedly obvious over Bolin and Kanai. Claim 15 is representative of this grouping of claims. The grouping should not be construed to mean the patentability of any of the claims may be determined in later actions (*e.g.*, actions before a court) based on the groupings. Rather, the presumption of 35 USC § 282 shall apply to each of these claims individually.

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[9] Office action of November 14, 2009, Page 14, first full paragraph.

Claim 15 specifically recites, "receiving from the user a list of one or more media to be used." In Bolin, the librarian is provided a specific list of magnetic tapes to mount and unmount. The lists of devices in Bolin's Figure 5 are not provided **by** the librarian or user, but are provided **to** the librarian as a list of things to do. Thus, even if the teachings of Kanai are precisely as the Office action suggests (which Applicants do not admit), Bolin and Kanai still fail to teach "receiving from the user a list of one or more media to be used."

In the Response to Arguments section of the Office action, the following statement is made:

> The combination of Bolin and Kanai discloses "receiving from the user a list of one or more media to be used" as **[Bolin discloses cartridges where all cartridges are used for data storage (col. 9, line 51-col. 10, line 43; figure 5 and related text) wherein the mounting of at least one cartridge by the user according to [the] action list is interpreted as a list of <u>one or more media to be used</u>].**[10]

In Bolin, a cartridge is mounted because it appears on the list as in Bolin's Figure 5. Performing the action specifically delineated on Bolin's list cannot be fairly said to be "receiving from the user a list of one or more media to be used." Stated otherwise, mounting a specific cartridge as instructed by Bolin's system is not providing Bolin's system a list of media to be used.

Based on the foregoing, Appellants respectfully request that the rejections of this grouping be reversed, and the claims set for issue.

B. Section 103 Rejections over Bolin, Kanai and Carlson

1. Claims 6-7

Claims 6-7 are allowable for at least the same reasons as delineated in Section VII(A)(1).

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[10] Office action of November 14, 2009, Page 17, first full paragraph (emphasis original).

C.   Conclusion

For the reasons stated above, Appellants respectfully submit that the Examiner erred in rejecting all pending claims. It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper.   However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's Deposit Account No. 08-2025.

Respectfully submitted,

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VIII.   CLAIMS APPENDIX

1.   (Previously presented) A method comprising:

obtaining information regarding a future backup from one or more backup applications for a plurality of backup jobs;

calculating a projected number of media for a future execution of at least one of the backup jobs using the information regarding the future backup, said calculating also comprising dividing an average historical backup size of the backup job by an average capacity of a media type associated with the backup job; and

presenting the projected number of media to a user.

2.   (Cancelled).

3.   (Previously presented) The method of claim 1, wherein obtaining the information regarding the future backup further comprises obtaining information for one or more backup devices, each backup device associated with at least one of the backup jobs.

4.   (Previously presented) The method of claim 3, wherein presenting the projected number of media comprises presenting the projected number of media for each of the backup devices.

5.   (Previously presented) The method of claim 1, wherein obtaining the information regarding the future backup further comprises obtaining information for one or more media pools, each media pool associated with at least one of the backup jobs.

6.   (Previously presented) The method of claim 5, wherein calculating comprises, for each media pool:

determining an existing number of media in the media pool;

calculating the projected number of media for the future execution using
the media pool; and

subtracting the existing number from the projected number.

7.   (Previously presented) The method of claim 6, wherein determining the existing number further comprises determining if a protected period for one or more existing data media has expired.

8.   (Previously presented) The method of claim 5, wherein presenting the projected number of media further comprises presenting the projected number of media for each of the media pools.

9.   (Previously presented) The method of claim 5, wherein calculating further comprises using the media pool information to analyze historical usage of the media pools.

10.   (Previously presented) The method of claim 5, further comprising presenting a report to the user identifying at least one media pool having a greater amount of media than the projected number of media for the at least one media pool.

11.   (Cancelled).

12.   (Previously presented) The method of claim 1, further comprising:
wherein obtaining the information regarding the future backup further
comprises obtaining information for one or more media pools,
each media pool associated with the backup jobs; and
wherein calculating the projected number of media further comprises
totaling the projected number of media for each media pool to be
used by the future execution.

13.   (Previously presented) The method of claim 1, further comprising:

wherein the obtaining the information regarding the future backup further
comprises obtaining information for one or more backup devices
associated with the backup jobs; and

wherein calculating the projected number of media further comprises
totaling the projected number of media for each backup device to
be used by the future execution.

14.   (Previously presented) The method of claim 1, wherein calculating
further comprises calculating the projected number of media for the future
execution of the backup jobs scheduled within a predetermined period of time.

15.   (Previously presented) The method of claim 1, further comprising
receiving from the user a list of one or more media to be used.

16.   (Previously presented) The method of claim 15, further comprising for
each media in the list, determining if the media is a valid media.

17.   (Previously presented) A system comprising:

a computer system configured to receive backup job information for a
plurality of backup jobs from one or more backup applications, the
backup job information includes an average historical backup size
for one or more of the backup jobs;

a computer system configured to calculate a number of media for a future
execution of at least one of the backup jobs using the backup job
information, the number of media for the future execution
calculated by dividing the average historical backup size of the
backup job by an average capacity of a media type associated
with the backup job; and

a user interface configured to present the number of media to a user.

18.   (Previously presented) The system of claim 17, wherein the backup job information comprises information for one or more backup devices, each backup device associated with at least one of the backup jobs and said user interface is further to present the number of media for each of the backup devices.

19.   (Previously presented) The system of claim 17, wherein the backup job information includes information for one or more media pools, each media pool associated with at least one of the backup jobs and said user interface is further to present the number of media for each of the media pools.

20.   (Cancelled).

21.   (Previously presented) The system of claim 17, wherein said user interface is further configured to receive a list of one or more media to be used for at least a portion of the media.

22.   (Previously presented) The system of claim 21, wherein for each media in the list, said computer system configured to calculate a number of media is further configured to determine whether the media is a valid media.

23.   (Previously presented) A machine-readable storage medium having stored thereon sequences of instructions, which, when executed by a machine, cause the machine to:

    obtain backup job information from one or more backup applications for a
        plurality of backup jobs;
    calculate a proposed number of media for one or more future executions
        of at least one of the backup jobs using the backup job
        information; and
    present the proposed number of media to a user, wherein instructions for
        calculating the proposed number of scratch media comprise

instructions, which, when executed by the machine, cause the machine to perform, for each backup job, divide an average historical backup size by an average capacity of a media type associated with the backup job.

24.   (Previously presented) The storage medium of claim 23, wherein when the machine presents the proposed number of media the instructions cause the machine to present the proposed number of media for one or more backup devices, each of the backup devices associated with at least one of the backup jobs.

25.   (Previously presented) The storage medium of claim 23, wherein when the machine presents the proposed number of scratch media the instructions cause the machine to present the proposed number of media for one or more media pools, each media pool associated with at least one of the backup jobs.

26.   (Cancelled).

IX.   EVIDENCE APPENDIX

None.

X.   RELATED PROCEEDINGS APPENDIX

None.